## What commerce you will find in Milan Italia?

#### Josué Hernández Ponce de León

May 20, 2020

### 1. Introducction

### 1.1 Background

**Milan** is a city in northern Italy, capital of Lombardy, and the second-most populous city in Italy after Rome. Milan served as the capital of the Western Roman Empire, the Duchy of Milan and the Kingdom of Lombardy–Venetia. The city proper has a population of about 1.4 million while its metropolitan city has 3.26 million inhabitants. Its continuously built-up urban area, that stretches well beyond the boundaries of the administrative metropolitan city, is the fourth largest in the EU with 5.27 million inhabitants.

The city has been recognized as one of the world's four fashion capitals<sup>[16]</sup> thanks to several international events and fairs, including Milan Fashion Week and the Milan Furniture Fair, which are currently among the world's biggest in terms of revenue, visitors and growth It hosted the Universal Exposition in 1906 and 2015. The city hosts numerous cultural institutions, academies and universities, with 11% of the national total enrolled students.<sup>[20]</sup> Milan is the destination of 8 million overseas <sup>[10]</sup> visitors every year, attracted by its museums and art galleries that include some of the most important collections in the world, including major works by Leonardo da Vinci.

#### 1.2 Problem

In this project we will try to find an optimal location for a restaurant. Specifically, this report will be targeted to stakeholders interested in opening a \*\*Cinema \*\* in \*\*Milan\*\*, Italy.

Since there are lots of difference comerce in Milan we will try to detect \*\*locations that are not already crowded with cinemas\*\*. We are also particularly interested in \*\*areas with no cinema in vicinity\*\*. We would also prefer locations \*\*as close to city center as possible\*\*, assuming that first two conditions are met.

We will use our data science powers to generate a few most promissing neighborhoods based on this criteria. Advantages of each area will then be clearly expressed so that best possible final location can be chosen by stakeholders.

## 2. Data Acquisition and cleaning

#### 2.1 Data sources

This report going to use the data of postal code of the cities of Milan from <a href="http://es.gpspostcode.com/codigo-postal/italiana/milano/?tri=cp\_desc">http://es.gpspostcode.com/codigo-postal/italiana/milano/?tri=cp\_desc</a>, that i pass to my repository in Github in a file csv to make more easy the transformation.

And use Foursquare information to consult the places with relevance en every city or venue in Milan.

### 2.2 Data cleaning

In this case for the use of multiple information in distinct pages, we only need to rescue the most important information that is the correct name of the city o avenue, check the postal code between the data in foursquare and the information of the file.

After fixing these problems, I checked for outliers in the data. I found there were some extreme outliers, mostly caused by some types of small sample size problem.

In this case don't have missing data apparently.

## 3. Data analysis

#### 3.1 Information we need

#### **Foursquare**

Now that we have our location candidates, let's use Foursquare API to get info on commerce in each neighborhood.

We're interested in venues with coffe shops, pizza places, bakeries etc. are not direct competitors. So we will include in out list only venues that have commerce in category name, and we'll make sure to detect and include all the subcategories of specific category, as we need info in the neighborhood.

#### **Neighborhood Candidates**

Let's create latitude & longitude coordinates for centroids of our candidate neighborhoods or cities. We will create a grid of cells covering our area of interest which is aprox. 12x12 killometers centered around Milan city center.

Let's first find the latitude & longitude of Milan city center, using specific, well known address and Google Maps geocoding API.

#### 3.2 Data selection

### **3.3** Sample of the data selected for the data cleaning

	ср	ciudad	X	Y	lugar	pais
0	20162	Niguarda	45.4650	9.1880	Milan	Italia
1	20161	Bruzzano	45.5261	9.1750	Milan	Italia
2	20161	Affori	45.4971	9.1802	Milan	Italia
3	20157	Quarto oggiaro	45.5163	9.1367	Milan	Italia
4	20157	Vialba	45.4895	9.1644	Milan	Italia
5	20153	Trenno	45.5863	9.1614	Milan	Italia
6	20153	Figino	45.7107	9.1313	Milan	Italia
7	20152	Baggio	45.4580	9.0921	Milan	Italia
8	20151	Musocco	45.5040	9.1269	Milan	Italia
9	20143	Barona	45.4379	9.1538	Milan	Italia
10	20142	Gratosoglio	45.4135	9.1723	Milan	Italia
11	20139	Chiaravalle milanese	45.4177	9.2405	Milan	Italia
12	20138	Rogoredo	45.4311	9.2434	Milan	Italia

	сp	ciudad	X	Y	lugar	pais
13	20134	Lambrate	45.4828	9.2405	Milan	Italia
14	20127	Crescenzago	45.5080	9.2465	Milan	Italia
15	20125	Greco	45.5011	9.2105	Milan	Italia
16	20125	Precotto	45.4848	9.1997	Milan	Italia
17	20125	Gorla	45.4848	9.2006	Milan	Italia
18	20100	Milano	45.4656	9.1887	Milan	Italia
19	20099	Sesto san giovanni	45.5332	9.2348	Milan	Italia
20	20098	Borgo lombardo	45.3962	9.2672	Milan	Italia
21	20098	San giuliano milanese	45.3963	9.2865	Milan	Italia
22	20098	Sesto ulteriano	45.3968	9.2491	Milan	Italia
23	20097	Poasco	45.4011	9.2307	Milan	Italia
24	20097	Sorigherio	45.4107	9.2483	Milan	Italia
25	20097	San donato milanese	45.4190	9.2678	Milan	Italia
26	20097	Metanopoli	45.4102	9.2479	Milan	Italia
27	20096	Pioltello	45.5065	9.3329	Milan	Italia
28	20096	Seggiano	45.4887	9.3222	Milan	Italia
29	20096	Limito	45.4833	9.3291	Milan	Italia
•••						
45	20090	Segrate	45.4971	9.2924	Milan	Italia
46	20090	Tregarezzo	45.4542	9.2195	Milan	Italia
47	20090	Caleppio	45.4337	9.3822	Milan	Italia
		Trezzano sul naviglio	45.4236	9.0676	Milan	Italia
49	20090	Opera	45.3718	9.2100	Milan	Italia
50	20090	Lucino	45.7835			
		Noverasco	45.3964	9.2135	Milan	Italia
52	20090	Sporting mirasole	45.4524			
53	20090	Romano banco	45.4531	9.2190	Milan	Italia
		Zingone	45.4538			
		Cusago	45.4503			
		Zingone di trezzano sul naviglio				
		Novegro	45.4676			
		Fizzonasco	45.3736			
		Premenugo	45.4532			
60	20090	Pieve emanuele	45.3507	9.2015	Milan	Italia

	cp	ciudad	X	Y	lugar	pais
61	20090	Millepini	45.4533	9.2177	Milan	Italia
62	20090	Settala	45.4549	9.3876	Milan	Italia
63	20090	Pantigliate	45.4356	9.3524	Milan	Italia
64	20089	Rozzano	45.3810	9.1611	Milan	Italia
65	20089	Quinto de stampi	45.3956	9.1703	Milan	Italia
66	20088	Rosate	45.3532	9.0178	Milan	Italia
<b>67</b>	20088	Gudo visconti	45.3741	9.0001	Milan	Italia
68	20087	Robecco sul naviglio	45.4377	8.8847	Milan	Italia
69	20087	Casterno	45.4376	8.8841	Milan	Italia
<b>70</b>	20086	Motta visconti	45.2895	8.9939	Milan	Italia
71	20085	Locate di triulzi	45.3569	9.2271	Milan	Italia
72	20084	Lacchiarella	45.3252	9.1386	Milan	Italia
<b>73</b>	20083	Gaggiano	45.4044	9.0363	Milan	Italia
74	20083	San vito	45.4176	9.0009	Milan	Italia

## 3.4 Relation between data

This is the example of the relation that have the city of Milan with the others avenues.



In this case Milan has 75 neighborhoods close to the center that have distinct commerce every one

# 3.5 Categories of commerce

A Sample of the commerce categories that managed Milan

	place	Commerce	latitude	
1	Starbucks Reserve Roastery	Coffee Shop	45.464920	9.186153
2	Piazza del Duomo	Plaza	45.464190	9.189527
3	Room Mate Giulia Hotel	Hotel	45.465250	9.189396
4	Park Hyatt Milan	Hotel	45.465532	9.188911
5	Ciacco. Gelato senz'altro	Ice Cream Shop	45.463704	9.186796
6	Hotel Spadari al Duomo	Hotel	45.463738	9.187130
7	Venchi	Ice Cream Shop	45.465214	9.187340
8	Pasticceria Marchesi	Pastry Shop	45.465612	9.190091
9	Bialetti Store	Kitchen Supply Store	45.464775	9.188343
10	Ladurée	Dessert Shop	45.463586	9.187239
11	Palazzo della Ragione	Monument / Landmark	45.464792	9.187785
12	Prada	Boutique	45.465600	9.189968
13	Monumento A Vittorio Emanuele II	Monument / Landmark	45.464190	9.189458
14	Pinacoteca Ambrosiana	Art Museum	45.463768	9.186251

Milan has 1288 distinct commerce's around the 75 neighborhood that has the city.

In this case they are 171 different commerce and they don't have any cinema there.

## 3.6 Commerce's by neighborhood

Presentation of the 5 most common commerce for every neighborhood

```
-----Affori-----
             venue freq
O Pizza Place 0.09
1 Italian Restaurant 0.09
2 Hotel 0.07
3
      Tram Station 0.07
             Park 0.04
-----Assago-----
           venue freq
       Pizza Place 0.2
1
       Steakhouse 0.2
2 Italian Restaurant 0.2
3 Restaurant 0.2
4 Convenience Store 0.2
-----Baggio-----
         venue freq
         Pizza Place 0.33
         Café 0.22
2 Japanese Restaurant 0.11
3 Italian Restaurant 0.11
        Supermarket 0.11
-----Barona-----
     venue freq
    Pizza Place 0.08
1 Bakery 0.08
2 Supermarket 0.08
3 Gym 0.08
4 Tennis Stadium 0.08
-----Borgo lombardo-----
             venue freq
0 Furniture / Home Store 0.14
1 Toll Booth 0.14
2 Lombard Restaurant 0.14
3
          Cupcake Shop 0.14
              Fountain 0.14
-----Bresso-----
         venue freq
        Supermarket 0.43
```

1 Japanese Restaurant 0.29

<pre>Volleyball Court 0.14 Ice Cream Shop 0.14 Accessories Store 0.00</pre>
Bruzzano venue freq
0 Italian Restaurant 0.2 1 Bakery 0.2 2 Bus Stop 0.1 3 Pizza Place 0.1 4 Gift Shop 0.1
Buccinasco
venue freq 0 Basketball Court 0.25 1 Pizza Place 0.25 2 Soccer Field 0.25 3 Park 0.25 4 Accessories Store 0.00
Caleppio
venue freq 0 Chinese Restaurant 0.25 1 Seafood Restaurant 0.12 2 Pub 0.12 3 Market 0.12 4 Italian Restaurant 0.12
Casterno
venue freq 0 Plaza 0.14 1 Italian Restaurant 0.14 2 Movie Theater 0.14 3 Restaurant 0.14 4 Bar 0.14
Casana hassana
venue freq  O Pizza Place 0.22  1 Italian Restaurant 0.22  2 Seafood Restaurant 0.11  3 Café 0.11  4 Ice Cream Shop 0.11
Chiaravalle milanese
venue freq  0 Diner 0.25  1 Italian Restaurant 0.25  2 Restaurant 0.25  3 Convenience Store 0.25  4 Accessories Store 0.00

```
-----Cinisello balsamo-----
                 venue freq
  Mexican Restaurant 0.2
1
   Italian Restaurant 0.2
          Costume Shop 0.2
        Shipping Store 0.2
4 Gym / Fitness Center 0.2
-----Cologno monzese-----
             venue freq
          Pizza Place 0.18
1
    Department Store 0.09
             Wine Bar 0.09
3 Diner 0.09
4 Japanese Restaurant 0.09
-----Corsico-----
               venue freq
               Park 0.23
1 Italian Restaurant 0.15
Restaurant 0.15
Plaza 0.08
4 Chinese Restaurant 0.08
-----Crescenzago-----
                   venue freq
0 Hotel 0.15
1 Italian Restaurant 0.15
                   Café 0.08
3 Furniture / Home Store 0.08
          Breakfast Spot 0.08
-----Cusago-----
             venue freq
0
          Cafeteria 0.25
1
             Café 0.25
             Castle 0.25
3 Ice Cream Shop 0.25
4 Accessories Store 0.00
-----Cusano milanino-----
               venue freq
               Café 0.25
1 Italian Restaurant 0.25
   Pizza Place 0.12
Breakfast Spot 0.12
        Supermarket 0.12
```

-----Figino-----

0 1 2 3 4	Volle	Super yball		l t t é	req 0.2 0.2 0.2 0.2 0.2
0 1 2 3 4		Flea Llane	ve a Mar ous S za Pl ink S	nue ket hop ace hop	freq 0.2 0.2 0.2 0.2 0.2
0 1 2 3 4	Gaç	_	ve ake S C staur	afé ant ark	freq 0.17 0.17 0.17 0.17
0 1 2 3 4	Goi	Piz	ve staur Ho	tel afé ace	freq 0.20 0.15 0.11 0.04 0.04
0 1 2 3 4	Gra	Rail Socc	ve Bus S	nue top ion eld ter	freq 0.2 0.2 0.2 0.2 0.2
0 1 2 3 4	PI Ice Ci Piz	v ktail Laygr	Bar Dund Shop lace	fre 0.1 0.0 0.0 0.0	.7 18 18
 0 1	Guo	Rest	scont venu auran l Hal	e f	7 Freq 0.4 0.2

Pizza Place 0.2 Business Service 0.2 Pastry Shop 0.0
venue freq Diner 0.12 Miscellaneous Shop 0.12 Pizza Place 0.12 Soccer Field 0.12 Italian Restaurant 0.12
venue freq Café 0.14 Pizza Place 0.12 Italian Restaurant 0.10 Tram Station 0.06 Platform 0.04
venue freq  Italian Restaurant 0.25  Pub 0.12  Supermarket 0.12  Restaurant 0.12  Farmers Market 0.12
venue freq  Italian Restaurant 0.19  Pizza Place 0.08  Tram Station 0.08  Ice Cream Shop 0.06  Clothing Store 0.06
Locate di triulzi venue freq 0 Pizza Place 0.2 1 Italian Restaurant 0.2 2 Supermarket 0.2 3 Ice Cream Shop 0.2 4 Restaurant 0.2
venue freq venue freq Pub 0.2 Burger Joint 0.2 Big Box Store 0.1 Pizza Place 0.1 Fast Food Restaurant 0.1

Metanopoli
venue freq 0 Spanish Restaurant 0.5 1 Café 0.5 2 Pastry Shop 0.0 3 Opera House 0.0 4 Optical Shop 0.0
Milanino
venue freq 0 Italian Restaurant 0.23 1 Pizza Place 0.15 2 Plaza 0.08 3 Pub 0.08 4 Café 0.08
Milano
venue freq 0 Italian Restaurant 0.09 1 Hotel 0.07 2 Monument / Landmark 0.05 3 Ice Cream Shop 0.05 4 Lounge 0.04
venue freq  1 Italian Restaurant 0.19  2 Pizza Place 0.08  3 Clothing Store 0.06  4 Supermarket 0.03
Monzoro
venue freq 0 Italian Restaurant 0.21 1 Pizza Place 0.09 2 Tram Station 0.09 3 Clothing Store 0.06 4 Rock Club 0.03
Motta visconti
venue freq 0 Pizza Place 0.25 1 Multiplex 0.25 2 Ice Cream Shop 0.25 3 Food 0.25

-----Musocco-----

venue freq Diner 0.17 Pizza Place 0.08 Department Store 0.08 Brewery 0.08 Italian Restaurant 0.08
venue freq  Italian Restaurant 0.11  Hotel 0.09  Plaza 0.07  Café 0.07  Monument / Landmark 0.06
venue freq Novegro venue freq Hotel 0.43 Rental Car Location 0.29 French Restaurant 0.14 Soccer Field 0.14 Accessories Store 0.00
Noverasco venue freq 0 Italian Restaurant 0.33 1 Soccer Field 0.17 2 Supermarket 0.17 3 Café 0.17 4 Hotel 0.17
venue freq Café 0.2 Supermarket 0.2 Italian Restaurant 0.2 Hotel 0.2 Clothing Store 0.2
Pantigliate venue freq 0 Convenience Store 0.14 1 Soccer Field 0.14 2 Outdoors & Recreation 0.14 3 Water Park 0.14 4 Dance Studio 0.14
Pieve emanuele venue freq Hotel 0.25 Pizza Place 0.25

```
2 Supermarket 0.25
3 Asian Restaurant 0.25
       Pastry Shop 0.00
-----Pioltello-----
                 venue freq
                 Café 0.33
           Pizza Place 0.17
1
           Auto Garage 0.17
3 Gym 0.17
4 Gym / Fitness Center 0.17
-----Poasco----
             venue freq
       Playground 0.33
Bus Station 0.33
Café 0.33
1
3 Accessories Store 0.00
4 Pastry Shop 0.00
-----Precotto-----
              venue freq
0 Italian Restaurant 0.19
1
              Hotel 0.15
2
               Café 0.11
         Pizza Place 0.04
4 Chinese Restaurant 0.04
-----Premenugo-----
       venue freq
0 Italian Restaurant 0.15
1 Pizza Place 0.08
       Tram Station 0.08
3 Clothing Store 0.05
4 Theater 0.03
----Quarto oggiaro----
       venue freq
       Plaza 0.2
1 Park 0.2
2 Pizza Place 0.2
3 Supermarket 0.2
4 Bus Stop 0.2
-----Quinto de stampi-----
venue freq
0 Clothing Store 0.33
1 German Restaurant 0.17
2 Pizza Place 0.17
3 Athletics & Sports 0.17
         Men's Store 0.17
```

```
-----Robecco sul naviglio-----
               venue freq
               Plaza 0.14
1 Italian Restaurant 0.14
2 Movie Theater 0.14
3
         Restaurant 0.14
                 Bar 0.14
-----Rodano-----
              venue freq
            Stadium 0.2
       Soccer Field 0.2
2 Italian Restaurant 0.2
              Bakery 0.2
Bar 0.2
4
-----Rogoredo-----
       venue freq
     Platform 0.25
     Café 0.25
2 Pizza Place 0.12
3 Bus Stop 0.12
     Pharmacy 0.12
-----Romano banco-----
               venue freq
0 Italian Restaurant 0.21
1 Pizza Place 0.09
1
2
        Tram Station 0.09
3
     Ice Cream Shop 0.06
     Clothing Store 0.06
-----Rosate-----
       venue freq
        Café 0.50
0
1
       Plaza 0.25
       Hotel 0.25
3 Pastry Shop 0.00
4 Opera House 0.00
-----Rozzano-----
                venue freq
                Park 0.14
1
                Plaza 0.14
           Supermarket 0.14
                Café 0.14
4 Fried Chicken Joint 0.14
```

-----San donato milanese-----

```
Dessert Shop 0.17
        Supermarket 0.17
1
2 Italian Restaurant 0.17
3 Restaurant 0.17
4 Bank 0.17
-----San felice-----
              venue freq
0 Italian Restaurant 0.15
               Diner 0.08
2
               Gym 0.08
3
        Soccer Field 0.08
            Creperie 0.08
-----San giuliano milanese-----
               venue freq
         Pizza Place 0.50
1 Italian Restaurant 0.25
        Flower Shop 0.25
3 Accessories Store 0.00
         Pastry Shop 0.00
-----San maurizio al lambro-----
               venue freq
          Pizza Place 0.18
1
               Diner 0.09
Wine Bar 0.09
3 Dance Studio 0.09
4 Japanese Restaurant 0.09
-----San vito-----
           venue freq
0 Italian Restaurant 1.0
1 Accessories Store 0.0
2 Pedestrian Plaza 0.0
3
        Opera House 0.0
4
        Optical Shop 0.0
-----Seggiano-----
        venue freq
0
        Lawyer 0.2
        Bar 0.2
1
2 Food Court 0.2
    Café 0.2
4 Dessert Shop 0.2
-----Segrate----
            venue freq
0 Sushi Restaurant 0.25
             Plaza 0.12
```

venue freq

```
Food 0.12
3
              Pool 0.12
              Café 0.12
4
-----Sesto san giovanni-----
               venue freq
0 Italian Restaurant 0.21
                Café 0.14
1
2
                Bar 0.07
3 Dessert Shop 0.07
4 Ice Cream Shop 0.07
-----Sesto ulteriano-----
               venue freq
Dessert Shop 0.25
Italian Restaurant 0.25
Restaurant 0.25
                Café 0.25
3
4 Pedestrian Plaza 0.00
-----Settala-----
              venue freq
0 Italian Restaurant 0.4
1 Jewelry Store 0.2
2
          Cafeteria 0.2
          Skate Park 0.2
4 Accessories Store 0.0
-----Sorigherio-----
               venue freq
0 Spanish Restaurant 0.5
1
               Café 0.5
2
         Pastry Shop 0.0
         Opera House 0.0
3
        Optical Shop 0.0
-----Sporting mirasole-----
                      venue freq
          Italian Restaurant 0.28
               Pizza Place 0.08
Tram Station 0.08
1
3 Middle Eastern Restaurant 0.04
                Outlet Mall 0.04
-----Tregarezzo-----
venue freq
0 Italian Restaurant 0.17
1 Tram Station 0.17
2
        Pizza Place 0.09
3
               Park 0.06
4 Ice Cream Shop 0.06
```

```
venue freq
              Park 0.50
1
             Track 0.25
2 Ice Cream Shop 0.25
3 Accessories Store 0.00
       Opera House 0.00
-----Trezzano sul naviglio-----
              venue freq
 Italian Restaurant 0.29
              Hotel 0.14
2
       Cocktail Bar 0.07
          Café 0.07
Steakhouse 0.07
3
4
-----Vialba-----
              venue freq
0 Italian Restaurant 0.14
   Pizza Place 0.08
        Restaurant 0.06
Café 0.06
3
4
       Tram Station 0.06
-----Vimodrone-----
               venue freq
              Spa 0.17
Plaza 0.17
0
1
2 Breakfast Spot 0.17
3 Italian Restaurant 0.17
      Metro Station 0.17
----Zingone----
              venue freq
       Tram Station 0.10
1 Italian Restaurant 0.10
        Pizza Place 0.07
               Park 0.05
4 Clothing Store 0.05
-----Zingone di trezzano sul naviglio-----
              venue freq
0 Italian Restaurant 0.16
       Tram Station 0.13
    Pizza Place 0.08
Clothing Store 0.05
3
               Park 0.05
```

----Trenno----

# 4. Conclusión

In this case could confirm that the better places to put a cinema is in the segmentation 0 because the frequency of people is most tan the other for the type of commerce we have close, the segmentation stay that form where the first selection is the place more optimum to collocate a cinemas.

First selection: 23 neighborhoods

	ciudad	1st Most Common Commerce in City	2nd Most Common Commerce in City	3rd Most Common Commerce in City	4th Most Common Commerce in City	5th Most Common Commerce in City
2	Affori	Italian Restaurant	Pizza Place	Hotel	Tram Station	Park
7	Baggio	Pizza Place	Café	Japanese Restaurant	Supermarket	Bar
8	Musocco	Diner	Pizza Place	Mexican Restaurant	Department Store	Italian Restaurant
9	Barona	Pizza Place	Supermarket	Martial Arts Dojo	Tennis Stadium	Rock Club
10	Gratosoglio	Soccer Field	Bus Stop	Light Rail Station	Tram Station	Theater
13	Lambrate	Café	Pizza Place	Italian Restaurant	Tram Station	Platform
15	Greco	Cocktail Bar	Ice Cream Shop	Tunnel	Steakhouse	Chinese Restaurant
20	Borgo lombardo	Cupcake Shop	Lombard Restaurant	Furniture / Home Store	Outlet Store	Fountain
21	San giuliano milanese	Pizza Place	Italian Restaurant	Flower Shop	Wings Joint	Farmers Market
33	Cologno monzese	Pizza Place	Diner	Food	Café	Paper / Office Supplies Store
34	San maurizio al lambro	Pizza Place	Dance Studio	Wine Bar	Japanese Restaurant	Ice Cream Shop
36	Bresso	Supermarket	Japanese Restaurant	Volleyball Court	Ice Cream Shop	Farmers Market
37	Buccinasco	Pizza Place	Soccer Field	Basketball Court	Park	Farmers Market
41	Assago	Italian Restaurant	Convenience Store	Steakhouse	Restaurant	Pizza Place

	ciudad	1st Most Common Commerce in City	2nd Most Common Commerce in City	3rd Most Common Commerce in City	4th Most Common Commerce in City	5th Most Common Commerce in City
50	Lucino	Burger Joint	Pub	Multiplex	Pizza Place	Big Box Store
54	Zingone	Italian Restaurant	Tram Station	Pizza Place	Clothing Store	Park
58	Fizzonasco	Pizza Place	Food & Drink Shop	Miscellaneous Shop	Clothing Store	Flea Market
60	Pieve emanuele	Pizza Place	Supermarket	Asian Restaurant	Hotel	Farmers Market
65	Quinto de stampi	Clothing Store	Athletics & Sports	German Restaurant	Men's Store	Pizza Place
67	Gudo visconti	Restaurant	Pool Hall	Business Service	Pizza Place	Wings Joint
70	Motta visconti	Multiplex	Pizza Place	Ice Cream Shop	Food	Farmers Market
71	Locate di triulzi	Italian Restaurant	Supermarket	Restaurant	Pizza Place	Ice Cream Shop
72	Lacchiarella	Soccer Field	Pizza Place	Italian Restaurant	Shopping Mall	Diner

## **Second selection**: 2 neighborhoods

		1st Most	2nd Most	3rd Most	4th Most	5th Most
	ciudad	Common	Common	Common	Common	Common
	ciudad	Commerce in	Commerce in	Commerce in	Commerce in	Commerce in
		City	City	City	City	City
24	Sorigherio	Spanish Restaurant	Wings Joint	Farmers Market	French Restaurant	Fountain
26	Metanopoli	Spanish Restaurant	Wings Joint	Farmers Market	French Restaurant	Fountain

# Third selection: 2 neighborhoods

	ciudad	1st Most Common Commerce in City	2nd Most Common Commerce in City	3rd Most Common Commerce in City	4th Most Common Commerce in City	5th Most Common Commerce in City
0	Niguarda	Italian Restaurant	Hotel	Café	Plaza	Monument / Landmark
1	Bruzzano	Italian Restaurant	Bakery	Bus Stop	Ice Cream Shop	Pizza Place
4	Vialba	Italian Restaurant	Pizza Place	Café	Restaurant	Tram Station

	ciudad	1st Most Common Commerce in City	2nd Most Common Commerce in City	3rd Most Common Commerce in City	4th Most Common Commerce in City	5th Most Common Commerce in City
6	Figino	Volleyball Court	Supermarket	Food	Hotel	Café
11	Chiaravalle milanese	Italian Restaurant	Convenience Store	Diner	Restaurant	Wings Joint
14	Crescenzago	Italian Restaurant	Hotel	Breakfast Spot	Bus Stop	Café
16	Precotto	Italian Restaurant	Hotel	Café	Pizza Place	Chinese Restaurant
17	Gorla	Italian Restaurant	Hotel	Café	Restaurant	Chinese Restaurant
18	Milano	Italian Restaurant	Hotel	Monument / Landmark	Ice Cream Shop	Café
19	Sesto san giovanni	Italian Restaurant	Café	Dessert Shop	Ice Cream Shop	Bar
22	Sesto ulteriano	Italian Restaurant	Dessert Shop	Restaurant	Café	Wings Joint
25	San donato milanese	Italian Restaurant	Dessert Shop	Coffee Shop	Supermarket	Restaurant
29	Limito	Italian Restaurant	Pub	Supermarket	Restaurant	Train Station
30	Milanino	Italian Restaurant	Pizza Place	Ice Cream Shop	Breakfast Spot	Plaza
31	Cusano milanino	Café	Italian Restaurant	Gym	Pizza Place	Supermarket
35	Cinisello balsamo	Gym / Fitness Center	Italian Restaurant	Costume Shop	Shipping Store	Mexican Restaurant
39	San felice	Italian Restaurant	Gym	Pizza Place	Diner	Pool
42	Linate aeroporto	Italian Restaurant	Pizza Place	Tram Station	Park	Clothing Store
43	Cesano boscone	Italian Restaurant	Pizza Place	Seafood Restaurant	Movie Theater	Café
44	Monzoro	Italian Restaurant	Pizza Place	Tram Station	Clothing Store	Gym
46	Tregarezzo	Italian Restaurant	Tram Station	Pizza Place	Park	Ice Cream Shop
47	Caleppio	Chinese Restaurant	Italian Restaurant	Ice Cream Shop	Pub	Market
48	Trezzano sul naviglio	Italian Restaurant	Hotel	Gym Pool	Steakhouse	Café
49	Opera	Clothing Store	Italian Restaurant	Supermarket	Hotel	Café

	ciudad	1st Most Common Commerce in City	2nd Most Common Commerce in City	3rd Most Common Commerce in City	4th Most Common Commerce in City	5th Most Common Commerce in City
51	Noverasco	Italian Restaurant	Soccer Field	Supermarket	Hotel	Café
52	Sporting mirasole	Italian Restaurant	Pizza Place	Tram Station	Gym	Burger Joint
53	Romano banco	Italian Restaurant	Pizza Place	Tram Station	Ice Cream Shop	Clothing Store
56	Zingone di trezzano sul naviglio	Italian Restaurant	Tram Station	Pizza Place	Park	Clothing Store
57	Novegro	Hotel	Rental Car Location	French Restaurant	Soccer Field	Event Space
59	Premenugo	Italian Restaurant	Tram Station	Pizza Place	Clothing Store	Restaurant
61	Millepini	Italian Restaurant	Pizza Place	Tram Station	Clothing Store	Gym
62	Settala	Italian Restaurant	Jewelry Store	Skate Park	Cafeteria	Wings Joint
73	Gaggiano	Cupcake Shop	Cocktail Bar	Café	Theater	Park

# Fourth selection: 7 neighborhoods

	ciudad	1st Most Common Commerce in City	2nd Most Common Commerce in City	3rd Most Common Commerce in City	4th Most Common Commerce in City	5th Most Common Commerce in City
12	Rogoredo	Platform	Café	Pharmacy	Cafeteria	Trattoria/Osteria
23	Poasco	Playground	Bus Station	Café	Dance Studio	Fountain
27	Pioltello	Café	Pizza Place	Auto Garage	Gym / Fitness Center	Fast Food Restaurant
28	Seggiano	Smoke Shop	Lawyer	Food Court	Café	Wings Joint
55	Cusago	Ice Cream Shop	Cafeteria	Café	Castle	Wings Joint
58	Fizzonasco	Pizza Place	Pharmacy	Miscellaneous Shop	Café	Fast Food Restaurant
66	Rosate	Café	Plaza	Hotel	Farmers Market	Fountain

Fifth Selection: 5 neighborhoods that you have to avoid to collocate a cinema

	ciudad	1st Most Common Commerce in City	2nd Most Common Commerce in City	3rd Most Common Commerce in City	4th Most Common Commerce in City	5th Most Common Commerce in City
6	Figino	Volleyball Court	Supermarket	Hotel	Food	Café
36	Bresso	Supermarket	Café	Japanese Restaurant	Volleyball Court	Chinese Restaurant
49	Opera	Clothing Store	Italian Restaurant	Supermarket	Hotel	Café
57	Novegro	Hotel	Rental Car Location	French Restaurant	Farm	Fountain
60	Pieve emanuele	Pizza Place	Supermarket	Asian Restaurant	Hotel	Farmers Market

## The map represented by this section

